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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/578,828

05/09/2006

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PU030310

5255

24498

7590

07/08/2008

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EXAMINER

CHOKSHI, PINKAL R

ART UNIT

PAPER NUMBER

2623

MAIL DATE

DELIVERY MODE

07/08/2008

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/578,828	Applicant(s) MEARS ET AL.	
	Examiner PINKAL CHOKSHI	Art Unit 2623	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 12 December 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-18 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-18 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 09 May 2006 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>5/9/06</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. **Claims 1-18** are rejected under 35 U.S.C. 103(a) as being unpatentable over WO Publication 01/06771 A1 to Johnson et al (hereafter referenced as Johnson) in view of US PG Pub 2005/0086693 A1 to Shintani et al (hereafter referenced as Shintani).

Regarding **claim 1**, “a method for enabling a channel search in a signal processing apparatus” reads on the method that scans received signal for channel mapping (abstract and title) disclosed by Johnson and represented in Fig. 1.

As to “method comprising the steps of: generating a signal suitable for coupling to a display device for displaying an on-screen menu” Johnson discloses (pg.5, lines 7-12) that the method displays OSD information, which is a part of television signal, on a display device as represented in Fig. 1 (element 22).

As to “enabling a user to present said channel search responsive to said on-screen menu” Johnson discloses (pg.3, lines 6-9) that the channel search menu allow the user to accomplish channel search on the selected signal input.

As to “wherein said plurality of options includes a first option to search at least one of a plurality of inputs to said signal processing apparatus” Johnson discloses (pg.6, lines 19-21 and pg.8, lines 6-7) that the channel search detects all available channels based on the selected signal inputs. As to “a second option to search at least one of a plurality of types of channels” Johnson discloses (pg.7, lines 9-22) that the channel search is started based on the user’s selection of channels characteristic (analog/digital) of the signal input.

Johnson does not teach the limitation “select a plurality of options.” However, Johnson discloses (pg.5, lines 9-12) the generation of on-screen menus and it would therefore be self obvious to the skilled person to consider allowing the selection of the said options from an on-screen menu, specially in the light of the description on pg.3, lines 10-12, mentioning the advantage of a single menu screen when compared to navigation through several menu screens. Johnson meets all the limitations of the claim except above limitation “select a plurality of options.” Shintani discloses (¶0038) that based on the user input, controller selects video input and type of video signals for channel search as represented in Fig. 3 (steps 312, 314, 316, 320). Therefore, it would have been obvious to one of the ordinary skills in the art at the time of the invention to provide multiple items for channel search selection as taught by Shintani in order to search all available channels on all available signals from all available input (¶0005).

Regarding **claim 2**, “the method wherein said plurality of inputs includes a cable input and an antenna input” Johnson discloses (pg.4, lines 29-31) that the analog/digital signals are received from antenna and cable TV as represented in Fig. 1 (element 34, 36, 38).

Regarding **claim 3**, “the method wherein said plurality of types of channels includes digital modulation channels and analog modulation channels” Johnson discloses (pg.3, lines 19-21) that the multimedia system receives analog/digital signals to perform channel search as represented in Fig. 1 (element 34, 36, 38).

Regarding **claim 4**, “the method wherein said plurality of options further includes a third option to detect a type of signal received via least one of said plurality of inputs” Johnson discloses (pg.7, lines 5-7 and pg.8, lines 14-16) that the detection of the type of signal may or may not be performed automatically. However, the examiner takes official notice that it was well known in the art at the time of the invention to manually select to detect a type of signal received in device. Therefore, it would have been obvious to one of ordinary skills in the art at the time of the invention to add manual selection to Johnson’s automatic system would have yielded predictable result of reducing the time to perform the channel search function.

Regarding **claim 5**, “the method wherein said plurality of options further includes a fourth option to search previously found channels” Shintani discloses (¶0028 and ¶0033) that the user manually input to rerun previously generated channel map to regenerate an updated channel map. Therefore, it would have been obvious to one of the ordinary skills in the art at the time of the invention to search previously found channels as taught by Shintani so the newly detected channel is simply assigned and incorporated into the updated channel map (¶0076).

Regarding **claim 6**, “the method further comprised of performing said channel search according to said plurality of options selected by said user” Johnson discloses (pg.2, line 22-pg.3, line 12) to perform channel searching based on user's selection to signal input and other variables.

Regarding **claim 7**, “an apparatus for enabling a channel search” reads on the apparatus that scans received signal for channel mapping (abstract and title) disclosed by Johnson and represented in Fig. 1.

As to “apparatus comprising: memory means for storing data used to generate a signal suitable for coupling to a display device for displaying an on-screen menu” Johnson discloses (pg.5, lines 7-12, 15-16; pg. 6, lines 1-3) that the apparatus stores data on the memory that displays OSD information, which is

a part of television signal, on a display device as represented in Fig. 1 (element 42).

As to “processing means for enabling a user to present said channel search responsive to said on-screen menu” Johnson discloses (pg.3, lines 6-9) that the channel search menu allow the user to accomplish channel search on the selected signal input.

As to “wherein said plurality of options includes a first option to search at least one of a plurality of inputs to said apparatus” Johnson discloses (pg.6, lines 19-21 and pg.8, lines 6-7) that the channel search detects all available channels based on the selected signal inputs. As to “a second option to search at least one of a plurality of types of channels” Johnson discloses (pg.7, lines 9-22) that the channel search is started based on the user’s selection of channels characteristic (analog/digital) of the signal input.

Johnson does not teach the limitation “select a plurality of options.” However, Johnson discloses (pg.5, lines 9-12) the generation of on-screen menus and it would therefore be self obvious to the skilled person to consider allowing the selection of the said options from an on-screen menu, specially in the light of the description on pg.3, lines 10-12, mentioning the advantage of a single menu screen when compared to navigation through several menu screens. Johnson meets all the limitations of the claim except above limitation “select a plurality of options.” Shintani discloses (¶0038) that based on the user input, controller selects video input and type of video signals for channel search

as represented in Fig. 3 (steps 312, 314, 316, 320). Therefore, it would have been obvious to one of the ordinary skills in the art at the time of the invention to provide multiple items for channel search selection as taught by Shintani in order to search all available channels on all available signals from all available input (¶0005).

Regarding **claim 8**, “the apparatus wherein said plurality of inputs includes a cable input and an antenna input” Johnson discloses (pg.4, lines 29-31) that the analog/digital signals are received from antenna and cable TV as represented in Fig. 1 (element 34, 36, 38).

Regarding **claim 9**, “the apparatus wherein said plurality of types of channels includes digital modulation channels and analog modulation channels” Johnson discloses (pg.3, lines 19-21) that the multimedia system receives analog/digital signals to perform channel search as represented in Fig. 1 (element 34, 36, 38).

Regarding **claim 10**, “the apparatus wherein said plurality of options further includes a third option to detect a type of signal received via least one of said plurality of inputs” Johnson discloses (pg.7, lines 5-7 and pg.8, lines 14-16) that the detection of the type of signal may or may not be performed automatically. However, the examiner takes official notice that it was well known

in the art at the time of the invention to manually select to detect a type of signal received in device. Therefore, it would have been obvious to one of ordinary skills in the art at the time of the invention to add manual selection to Johnson's automatic system would have yielded predictable result of reducing the time to perform the channel search function.

Regarding **claim 11**, "the apparatus wherein said plurality of options further includes a fourth option to search previously found channels" Shintani discloses (¶0028 and ¶0033) that the user manually input to rerun previously generated channel map to regenerate an updated channel map. Therefore, it would have been obvious to one of the ordinary skills in the art at the time of the invention to search previously found channels as taught by Shintani so the newly detected channel is simply assigned and incorporated into the updated channel map (¶0076).

Regarding **claim 12**, "the apparatus wherein said processing means enables performance of said channel search according to said plurality of options selected by said user" Johnson discloses (pg.2, line 22-pg.3, line 12) to perform channel searching based on user's selection to signal input and other variables.

Regarding **claim 13**, “a video signal processor” reads on the apparatus that scans received signal for channel mapping (abstract and title) disclosed by Johnson and represented in Fig. 1.

As to “processor comprising: a memory operative to store data used to generate a signal suitable for coupling to a display device for displaying an on-screen menu” Johnson discloses (pg.5, lines 7-12, 15-16; pg. 6, lines 1-3) that the apparatus stores data on the memory that displays OSD information, which is a part of television signal, on a display device as represented in Fig. 1 (element 42).

As to “a controller operative to enable a user to present a channel search responsive to said on-screen menu” Johnson discloses (pg.3, lines 6-9) that the channel search menu control by microcontroller allow the user to accomplish channel search on the selected signal input as represented in Fig. 1 (element 32).

As to “wherein said plurality of options includes a first option to search at least one of a plurality of inputs to said video signal processor” Johnson discloses (pg.6, lines 19-21 and pg.8, lines 6-7) that the channel search detects all available channels based on the selected signal inputs. As to “a second option to search at least one of a plurality of types of channels” Johnson discloses (pg.7, lines 9-22) that the channel search is started based on the user’s selection of channels characteristic (analog/digital) of the signal input.

Johnson does not teach the limitation “select a plurality of options.”

However, Johnson discloses (pg.5, lines 9-12) the generation of on-screen menus and it would therefore be self obvious to the skilled person to consider allowing the selection of the said options from an on-screen menu, specially in the light of the description on pg.3, lines 10-12, mentioning the advantage of a single menu screen when compared to navigation through several menu screens. Johnson meets all the limitations of the claim except above limitation “select a plurality of options.” Shintani discloses (¶0038) that based on the user input, controller selects video input and type of video signals for channel search as represented in Fig. 3 (steps 312, 314, 316, 320). Therefore, it would have been obvious to one of the ordinary skills in the art at the time of the invention to provide multiple items for channel search selection as taught by Shintani in order to search all available channels on all available signals from all available input (¶0005).

Regarding **claim 14**, “the video signal processor wherein said plurality of inputs includes a cable input and an antenna input” Johnson discloses (pg.4, lines 29-31) that the analog/digital signals are received from antenna and cable TV as represented in Fig. 1 (element 34, 36, 38).

Regarding **claim 15**, “the video signal processor wherein said plurality of types of channels includes digital modulation channels and analog modulation

channels” Johnson discloses (pg.3, lines 19-21) that the multimedia system receives analog/digital signals to perform channel search as represented in Fig. 1 (element 34, 36, 38).

Regarding **claim 16**, “the video signal processor wherein said plurality of options further includes a third option to detect a type of signal received via least one of said plurality of inputs” Johnson discloses (pg.7, lines 5-7 and pg.8, lines 14-16) that the detection of the type of signal may or may not be performed automatically. However, the examiner takes official notice that it was well known in the art at the time of the invention to manually select to detect a type of signal received in device. Therefore, it would have been obvious to one of ordinary skills in the art at the time of the invention to add manual selection to Johnson’s automatic system would have yielded predictable result of reducing the time to perform the channel search function.

Regarding **claim 17**, “the video signal processor wherein said plurality of options further includes a fourth option to search previously found channels” Shintani discloses (¶0028 and ¶0033) that the user manually input to rerun previously generated channel map to regenerate an updated channel map. Therefore, it would have been obvious to one of the ordinary skills in the art at the time of the invention to search previously found channels as taught by

Shintani so the newly detected channel is simply assigned and incorporated into the updated channel map (¶0076).

Regarding **claim 18**, “the video signal processor wherein said controller is further operative to enable performance of said channel search according to said plurality of options selected by said user” Johnson discloses (pg.2, line 22-pg.3, line 12) to perform channel searching based on user's selection to signal input and other variables.

Conclusion

3. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

- US Patent 6,721,018 to Shintani discloses a system for decreasing the time required to generate a channel map in a television signal receiver.
- US Patent 6,118,498 to Reitmeier discloses channel scanning in a television receiver.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to PINKAL CHOKSHI whose telephone number is (571) 270-3317. The examiner can normally be reached on Monday-Friday 8 - 5 pm (Alt. Friday off).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Brian Pendleton can be reached on 571-272-7527. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

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